Q.1. How many aggregate functions are there?

There are three categories, based on kind of aggregate function used:
1. Distributive
2. Algebraic
3. Holistic

Most large data warehousing applications require efficient computation of distributive and algebraic measures. Many efficient techniques can be difficult to compute holistic measures.

Q.2. Explain with example a star not query model.

The querying of multi-dimensional DB can be based on star model. A star model consists of radial lines emanating from a central point, where each line represents a concept hierarchy for dimension.

Q.3. a. Draw a star schema.

(c) 2^5 = 32
4. What are the steps in a project plan?

First: project planning
Second: requirements study
Third: analysis
Fourth: design
Fifth: testing
Sixth: documentation

4.5 Discuss:

Partial materialization: A data sub-catalog consists of a set of objects, each corresponding to a different degree of summarization of a given multidimensional data.

Materialization refers to the selection and computation of a subset of the objects in the catalog. Full materialization refers to the computation of all objects in the catalog.

4.6 What are the differences between:

- Information processing: supports querying, basic statistical analysis, and reporting using crosstabs, tables, charts or graphs.
- Analytical processing: supports basic OLAP operations, including slice and dice, drill-down, roll-up, and pivoting.
- Data mining: supports knowledge discovery by finding hidden patterns and associations, constructing analytical models, performing classification and prediction.